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**APPLICATION FOR  
UNITED STATES LETTERS PATENT**

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**TITLE:           ON-LINE DATA DISTRIBUTION  
                  AND BROADCAST SYSTEM**

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# **ON-LINE DATA DISTRIBUTION AND BROADCAST SYSTEM**

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## **BACKGROUND OF THE INVENTION**

### **Technical Field:**

This invention relates to a system and program to distribute and sell information that is contained in a dynamic database and to make that information available to users by way of television broadcast media.

More particularly, this invention relates to a method and means to provide television broadcasters a customized stream of edited data and accompanying graphics that is suitable for on-air display by a television broadcaster.

### **Description of Related Art:**

It is conventional at this time for the owner, creator, or merchandiser of data and graphics to deliver that material to a television broadcaster by e-mail or disk for on-air transmission. Graphics to accompany the presentation of such data are often generated in house by the television broadcaster to meet its specific programming and formatting requirements. The resulting media product may be presented, for example, in full screen, or in ticker or window format.

Integration of a purchased data stream by a television broadcaster into a desired broadcast format requires that the broadcaster maintain a staff and facilities adequate to perform that function. It also requires that the broadcaster select and maintain its editing and formatting software to be fully compatible with that used by its data providers.

It is apparent that a data and graphics stream that is ready for broadcast and customized to meet the needs and specifications of individual television broadcasters would avoid many of the disadvantages and responsibilities of the systems presently in use. This invention has that capability.

## **SUMMARY OF THE INVENTION**

This invention provides a system for merchandising and distributing information that is contained in a database, and particularly a proprietary database,

in a real-time, customized, and ready for broadcast format. An Internet web site is established by the database owner, and access to the web site is controlled and restricted to its customers which typically are television broadcasters. A customer broadcaster may access the web site through a web browser and obtain a particular and defined stream of data that is input by the database owner. That stream of data is customized and formatted to each customer's specifications by the database owner in a form that is ready for immediate on-air broadcast.

It is therefore an object of this invention to provide a system for merchandising a database in a customized form and in a broadcast format.

A specific object of this invention is to provide continuously updated weather and sports information in a customized format ready for television broadcast.

Other objects will become apparent from the following description of preferred embodiments of the invention.

#### **BRIEF DESCRIPTION OF THE DRAWINGS**

Specific and preferred embodiments of this invention are illustrated and described with reference to the drawing figures in which:

Figure 1 is a diagrammatic illustration of the system of this invention showing the relationships between and among the system participants;

Figure 2 illustrates a typical main menu that would be provided to a television broadcaster using the system of this invention to obtain access to a sports information database;

Figure 3 illustrates a typical main menu that would be provided to a television broadcaster using the system of this invention to obtain access to a weather information database; and

Figure 4 illustrates a typical sub-menu that is accessed by a broadcaster through the main menu of Figure 3 to specify the content and format of a data stream

#### **DESCRIPTION OF PREFERRED EMBODIMENTS OF THE INVENTION**

This invention, in its broadest form, provides a single remote editing location that supplies streams of data, and particularly proprietary data, that are customized to the individual needs and specifications of multiple television broadcaster

customers. Each data stream is ready for on-air transmission without further editing by television station personnel.

The data editing, distribution and broadcast system of this invention will be described first by reference to Figure 1. A proprietary database<sup>10</sup> is established and maintained with either a continuous or periodic input of information gathered from external sources. For purposes of illustration, input 12 may be weather data that is continuously gathered from a plurality of weather station sites. Those weather station sites are typically located at schools within the television station's dominant marketing area. The weather data that is gathered may include temperature, relative humidity, wind speed, wind direction, precipitation rate and accumulated amount, and other data of a similar nature. Data input 14 may include sports information such as, for example, the latest available information on scholastic and league amateur sports, team players, game schedules, team and player rankings, and the like.

Information from the database 10 is then selected, formatted, and integrated with suitable graphics in editing procedure 20. That editing produces a plurality of real-time data streams, each assigned to a specific customer, that are transmitted to web site 30 by way of communications channels 22, 24. Each data stream is tailored to an individual customer's needs and specifications, and is ready for on-air broadcast. An individual customer 34, 36 may access the web site, 30 by way of communications channels 26 and 28 respectively, to obtain access to its particular and individualized data stream. Because each data stream has been tailored to meet the broadcast requirements of a particular broadcaster customer, the data stream may be aired in real time as it is taken from the web site through transmission means 38 and 40 respectively. Voice overlay or commentary may accompany the transmission. Web site 30 is secured for use by authorized customers only by means of pass word protection in the usual fashion.

Although some, or even most, of the information contained in an individual data stream 22 may be common to that contained in another information stream 24, that common information may be differently formatted and otherwise customized to the needs and wishes of each individual broadcaster. For example, the information may be integrated in a different manner, presented with different

graphics, and formatted distinctively. Also, weather information from the customer's marketing area may be integrated with sports information from that same area. For example, such integration may include a local forecast of game-time weather conditions at a specific game site, or to highlight other relationships.

- 5     Formatting options may include data presentation in ticker form or in a full screen, window, or split screen arrangement.

Figures 2, 3 and 4 are illustrative of menus that are provided to a customer. Figure 2 is an example of a main menu 50 that is prepared for use by a customer of a sports information database to call up various data streams for broadcast and to specify data selection and formatting options. The left column 51 lists the various on-air tickers that are constantly being revised and updated in the editing procedure 20 to make each data stream continuously available for real time, on-air broadcast. In this particular instance, the customer can choose among a variety of options including a welcome ticker 53 that may be designed to introduce the service to the customer's broadcast audience, a schedule ticker 54 listing upcoming games and contests of interest to the audience, a split screen or banner style scores ticker 55 transmitting the results of such games and contests, a full screen scores ticker 56, and a combination schedule and scores ticker 57. Other combinations of data and formatting can be provided to suit a customer's needs including, for example, combining weather and sports data to provide weather forecasts for the time and site of a sports contest.

- 25     A customer may specify features of the on-air ticker that is created and constantly updated in the editing procedure 20, or may request changes to a ticker that is in use through the ticker setup menu illustrated in the right column 60 of Figure 2. The setup options available to the customer may include defining or changing the welcome ticker 61, the schedule ticker 62, the scores ticker 63, and the full screen scores ticker 64. Also, the customer may specify or change the logo or advertising message of a broadcast sponsor by way of menu access 65, and may define or change the mix of sports contests reported by way of menu access 66. All of those orders and changes are transmitted back to the web site 30 by way of communications channels 26 and 28, and then to the editing procedure 20 through communications channels 22 and 24.

Turning now to Figures 3 and 4, a typical weather ticker main menu 70 is shown in Figure 3. That menu provides the customer with four options; to return to default settings 72, to select the specific weather data to be broadcast 73, to edit information input by the station 74, and to run and broadcast the weather ticker 75. A typical submenu 80, which is called up by the select weather data option 73, is illustrated in Figure 4. That submenu allows the customer to specify which weather condition parameters are to be included in the edited stream of data transmitted to web site 30 from the editing procedure 20. As is illustrated in Figure 4, the submenu is arranged in a group of columns 81 and rows 82 for the convenient entry of the weather data desired and the format in which the data is to be presented. Other weather parameters, for example, the amount of precipitation over a specified time period, whether it is in the form of rain, sleet or snow, the relative humidity, and site-specific weather information, may be selected in a similar fashion.

While the system of this invention has been described in relation to dynamic databases concerned with sports and weather information, it may be used as well for other data categories or combinations thereof. It will be appreciated that the data distribution and broadcast system of this invention provides to the broadcast media an unsurpassed ability to disseminate selected, edited and up to date sports, weather and other information that is customized for the needs and interests of a specific market area.